

Title (en)  
CHARACTERIZATION OF SINGLE STRANDED NUCLEIC ACIDS BY MELTING ANALYSIS OF SECONDARY STRUCTURE USING DOUBLE STRAND-SPECIFIC NUCLEIC ACID DYE

Title (de)  
CHARAKTERISIERUNG EINZELSTRÄNGIGER NUKLEINSÄUREN DURCH SCHMELZANALYSE VON SEKUNDÄRSTRUKTUREN UNTER VERWENDUNG EINES STRANGSPEZIFISCHEN NUKLEINSÄUREFARBSTOFFS

Title (fr)  
CARACTERISATION D'ACIDES NUCLEIQUES SIMPLE BRIN PAR ANALYSE DE LA DENATURATION D'UNE STRUCTURE SECONDAIRE A L'AIDE D'UN COLORANT D'ACIDE NUCLEIQUE SPECIFIQUE DE DOUBLE BRIN

Publication  
**EP 1499745 A4 20060315 (EN)**

Application  
**EP 03724250 A 20030425**

Priority  
• US 0312962 W 20030425  
• US 37564002 P 20020426

Abstract (en)  
[origin: WO03091408A2] A novel method for characterizing nucleic acids. A nucleic acid is combined with a double stranded nucleic acid-specific dye to form a detectable complex between the dye and one or more double stranded structures within the nucleic acid. The combination is then exposed to varying temperatures and the fluorescence emission of the dye is measured to determine the melting temperature(s) for the double stranded structures. In some embodiments that melting temperature profile is then compared to melting temperature profiles generated for other nucleic acid(s) to discern differences between the compared nucleic acids.

IPC 1-7  
**C12Q 1/68**; C07H 21/02; C07H 21/04

IPC 8 full level  
**C12N 15/09** (2006.01); **C12Q 1/68** (2006.01); **G01N 21/78** (2006.01); **G01N 33/53** (2006.01); **G01N 33/566** (2006.01)

CPC (source: EP US)  
**C12Q 1/6827** (2013.01 - EP US)

Citation (search report)  
• [X] EP 0711840 A2 19960515 - HITACHI LTD [JP]  
• [X] US 6174670 B1 20010116 - WITTWER CARL T [US], et al  
• [Y] WO 0066777 A2 20001109 - QUALICON INC [US]  
• [Y] EP 0892071 A2 19990120 - TOSOH CORP [JP]  
• [X] VAN N T ET AL: "COMPARATIVE STUDIES ON THE SECONDARY STRUCTURE OF OVALBUMIN MESSENGER RNA AND ITS COMPLEMENTARY DNA TRANSCRIPT", BIOCHEMISTRY, AMERICAN CHEMICAL SOCIETY. EASTON, PA, US, vol. 16, no. 18, 1977, pages 4090 - 4100, XP002025762, ISSN: 0006-2960  
• See references of WO 03091408A2

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DOCDB simple family (application)  
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